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ABSTRACT

Since bibliographic services cannot be provided individually, it is this that offers the greatest potential for networking. This paper is concerned with the degree of success that libraries have in providing physical access to materials on the local level. Libraries do provide from their collections a large percent of items requested. If bibliographic access to collections were improved, then it is likely that local libraries would become even more self sufficient than they are today. (Other papers from this conference are available as LI 003360 - 003362 and LI 003364 through LI 003390) (Author/NH)

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LIMITS OF LOCAL SELF SUFFICIENCY

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Of the myriad of lapel buttons appearing at recent gatherings of librarians one states that "Networking is not a fairy tale." If not a fairy tale, certain aspects of networking, the traditional programs of library cooperation such as interlibrary lending, union lists, centralized cataloging and bibliographic services, have been around long enough to acquire some characteristics of a fairy tale. That these traditional forms have not made sharing of resources comparable with local ownership has forced libraries to assume the insurmountable task of attempting to provide the user on the local level with an ever greater portion of the scholarly record.

Any consideration of library networks, however they are defined and developed, must take cognizance of the seeming failure of our present programs for sharing resources. With interlibrary lending, with the known location of a higher portion of requested materials, and with copying devices, why have the users insisted on local ownership? If networks are teletype and telefacsimile <u>in lieu</u> of interlibrary loan, then nothing new has been added, with the exception of speed, and the user is still likely to demand copies in his own library. If networks are central computer storage of the location of materials <u>in lieu</u> of union lists, then nothing new has been added, with the exception of up-dating, and the user is still likely to demand local self sufficiency. If networking is not a fairy tale, then it must be more than new devices for the time-honored traditional practices.

Verner Clapp, in presenting the 18th Windsor Lecture in

Librarianship, noted that local self sufficiency requires all materials needed for research to be immediately at hand. That this is impossible, especially for a general research library, is obvious; less obvious, but perhaps equally true, is the fact that most libraries will make every effort to be self sufficient for a high portion of all users. This may be due to the nature of the discipline; this may be due to the inefficiencies of our present system of physically sharing resources, forcing the user to limit his use to materials on hand; or it may be due to an over-expanded and inefficient bibliographic system which denies the user information as to what is available--either locally or at some other source. For whatever reason, the user demands that the librarian provide locally more books, more journals, and more reports.

If libraries are to strive for local self sufficiency, it is necessary to draw a distinction between physical and bibliographic self sufficiency. Physical self sufficiency refers to the ability of the library to produce from its own collections, or from its immediate area, a bibliographic unit or a piece of information that is demanded by the user. Bibliographic self sufficiency, on the other hand, refers to the ability of the library to provide bibliographic identification and location of any one of a variety of research materials.

Inherent in the system of American librarianship is the attempt to provide the necessary book, article, report, or information for any user from local collections. In many libraries, and for a large number of users, the libraries have

been surprisingly successful in this attempt. The basic concepts of librarianship--book selection, organization of materials and reference service--are geared to providing specific information to a user upon request. In most cases we have even ignored worthwhile cooperative projects and the facilities of inter-library loan in order to be self sufficient for our users.

We have not been nearly as successful in the matter of providing our own bibliographic services on the local level. It would be fool-hardy for any library to make a solo attempt to provide bibliographic access to all of the units in the collection. We cannot get along without the printed and machine readable catalog copy from the Library of Congress or from the other sources of centralized cataloging. The analytics necessary to provide access to the periodicals and journals are presently available through the indexes and the abstracting services and cannot be produced on a local level to any degree of satisfaction. Bibliographic self sufficiency is impossible for any one library.

Since bibliographic services cannot be provided individually, it is this that offers the greatest potential for networking.

This paper will be concerned with the degree of success that libraries have in providing physical access to materials on the local level. Libraries do provide from their collections a large percent of items requested. If bibliographic access to collections were improved, then it is likely that local libraries would become even more self sufficient than they are today.

SELF SUFFICIENCY BY TYPE OF LIBRARY

If the library is described as a collection of graphic materials organized for effective use, then it is obvious that some libraries can be totally self sufficient. The housewife, with her shelf of cookbooks, can find more information than she wants to plan and prepare her three meals a day; a specialized research library, limited in its areas of concentration, with a small number of users, can respond favorably to most demands; a general research library, on the other hand, which must provide a multitude of materials to meet an ever-increasing variety of demands, finds it more difficult, but not necessarily impossible, to do so from local collections.

The libraries in our country range from the large research to the small one room school libraries. It is unnecessary to think in terms of networks connecting all libraries to provide equal access to all recorded information for all users. School libraries, for instance, are responsible only for the curricular needs of a limited number of students. It is possible for school libraries to meet these needs. They do not require access to another three, four, or five million volumes that would be made available through a networking program. Of course, there are a few advanced students, writing some term papers, who do not have their needs met on the local level. These cases are rare indeed! It is safe to assume that our school libraries, particularly in those states where an emphasis has been placed on their development, are largely self sufficient. If they are not, then it is from a lack of interest and lack of initiative

on the local level. A networking scheme is not likely to make these libraries noticeably more effective at providing physical access to materials than they are at the present time.

Public libraries, excluding those libraries responsible for research materials in the large metropolitan areas, also can be said to be largely self sufficient. The public library meets the informational and the recreational reading needs of a rather small number of people in the local community. It might even be considered as a library for the minority: with most needs being met by a well selected but limited number of books and periodicals. The recreational reading can be well satisfied at the local level. The information needs of the professional men, the businessmen, and the students are more varied. However, present programs of state support for local libraries should meet even these informational demands.

Extended public library service, to those not now being served, is possible on the local level. Such extended service, however, requires more in the way of imagination and leadership than it does in the way of physical resources.

Proposed library networks to make more materials available will add little for public libraries. The needs of these libraries that are not met locally or through the state system are not likely to need access to a large number of additional volumes.

State libraries have a variety of information demands. Not only do they attempt to backstop the local public libraries, but they have responsibilities to their own agencies and to their

own legislatures. State libraries do provide adequately for some of these responsibilities, but less so for others. For instance, the public library extension program, coordinated through a state library, can be nearly self sufficient on the local level. The demands for information through the state type of network are not so sophisticated as to be impossible to meet on a local level. The research needs of the legislature and of the legislative agencies are more difficult. In all cases, however, the state libraries can and do work through the university and other research collections available in the state. If information is not immediately available on a local level, meaning in the state capitol, then it should be identified and made available through other state sources. State libraries, therefore, can be considered self sufficient.

State librareis may be most important in network planning, however, especially if the plans as they are developed envision extended service to school and public libraries. Many state libraries, of course, serve as the principal node in state networks and may well serve as connectors in a national scheme.

College libraries, not unlike the school libraries, are responsible primarily for the support of curricular needs of their institutions. Such needs can be met with minimum number of volumes in a bssic collection and an adequate annual expenditure for books and periodicals. If local collections fall short of supporting curricular needs, this is not the fault of traditional library programs, but rather the fault of priorities established by the college. Such faults can and should be

corrected locally rather than depending on the grand networking scheme of tomorrow.

College libraries are generally self sufficient, or if they are not, then they should be. The demands of the bright undergraduate, or the research demands of the faculty, are likely to require only occasional use of a network that would provide access to several million more volumes.

University libraries range from small collections of 100,000 volumes to great collections of over 8,000,000 volumes. The smaller university libraries are not unlike the college libraries: they can and should be largely self sufficient.

University and other large research libraries, including the metropolitan public libraries, face an ever-increasing number of demands for more and more materials. To meet the local curricular or recreational needs takes only a small portion of the library budget; the remaining portion of the budget is devoted to fulfilling the research needs of the institution. In all cases, this remaining portion always seems insufficient. The variety of demands that are made upon university and other research collections make them difficult to classify in degree of success in providing information. Some users are always satisfied with local collections, while others have demands that must be supplemented by external sources.

Special libraries, particularly those of research institutions, have an advantage over university and research libraries in terms of the degree of specialization of the user. If the mission of the library is defined and limited, then it can be

self sufficient.

SELF SUFFICIENCY BY DISCIPLINE

Libraries are developed, maintained and supported in order to provide information as requested by their readers. The function is the same whether it is the limited needs of a school library or the multiple needs of the university library. The measure of success is the degree to which the libraries provide the informational needs of the potential users. Perhaps this can be better understood if we were to look at our success in meeting the needs of the scientist, the humanist, and the social and behavioral scientist.

As we look at the disciplines, it is necessary to repeat that we are considering only physical accessibility of materials. The degree of bibliographic accessibility in all fields leaves much to be desired. It is safe to assume that our libraries can provide more physical accessibility than they can bibliographic accessibility. The large number of journals and research reports for which we have no bibliographic access is scandalous. For all practical purposes many items on the shelves of our research libraries are not physically accessible to the potential user unless we have bibliographic access. At this point, however, we are concerned only with the degree of providing access to a book, an article, or a report once it has been identified by the user.

The following thoughts are based upon a large number of assumptions, most unproven. These assumptions, however, have

been developed over the years by observation, by analysis of the use studies, and by conversation. They are presented only as a point of reference, not as a definitive statement on literature use.

The physical scientist, with the exception of the mathematician, makes limited use of library resources. He is likely to be more interested in having the current periodicals on the shelves two days before they are published rather than having twenty years of the backruns of these periodicals. An increasing number of physical scientists are relying upon sources other than libraries for their information. The preprints, the symposia, and the research reports are as important as the current periodicals. If these materials can be identified, and if we can organize ourself in such a way as to get the material on our shelves in a rapid fashion, then we can satisfy most of the known needs of the physical scientist. The unknown needs, the material which the scientist himself does not even know he wants nor does he know it even exists, is more difficult. In some cases an information analysis center may be more important to him than a library.

The literature of the biological sciences differs from the physical sciences. The biological scientist requires long runs of a large number of periodicals. Once something has been described and classified, then it stays described and classified. It is more difficult to provide bibliographic identification of the description than physical accessibility to it. The biological scientist may want more periodicals and journals than most

libraries can possibly provide, and he wants complete runs. He also demands a variety of printed and machine readable bibliographic services. The monographic literature is important in terms of the classics and the landmarks, but is less important for research purposes than are the journals.

The social sciences are undergoing great change, especially in terms of library use. In times past it was thought that the social scientist needed the current monographs, that is, those monographs published during the past 25 to 30 years, and large collections of pamphlets and ephemeral material. He used the periodical literature to a degree, but not as much as he would the other types of collections. In recent years, however, the social scientist is becoming more of a behaviorist and relies more upon the difficult to come by research reports and processed materials. His laboratory has now become the community, and he is not the library user as he was in the past. The old concept of political-economy has given away to the new concept of community survey. This would seem to indicate that the libraries cannot be self sufficient for the social scientist. As a matter of fact, however, we are probably more self sufficient than we used to be because of the limited use being made of the libraries by social scientists. This is especially so if we consider the library use of the historian and anthropologist as being more like the humanist than the social scientist. Give the economist his statistics and give the behaviorist his research reports, and they will be mostly satisfied.

The humanist, of course, has an insatiable appetite for

that are little used for research. The problem is complicated by the fact that serial titles seem to have as much tenure as faculty members. Several studies show that a large portion of the citations in the literature are to a surprisingly small number of periodical titles. We talk in terms of 30 to 40 thousand serial titles, while the use studies show that the number being used is much/more limited.

If the first hypothesis noted above is correct, and we will assume so for the time being, then a library that will spend $1,000,000, in terms of today's dollars (not an impossible sum), for books and periodicals, will be able to supply requested copies of materials for most of its users over the next few years. The longer this expenditure remains at a high level, the more self sufficient the library will be. Dollars for the total library program can be a limiting factor for research institutions, but dollars for materials should not stop us from attempting a high degree of self sufficiency.

The information explosion, or whatever term you use for the large number of books and periodicals being published, is of prime concern when we talk in terms of an individual library supplying copies on demand. What saves libraries from being completely inundated with requests for materials is the lack of bibliographic identification. We should not put too high of a priority on acquiring large numbers of books and periodicals for which we do not have bibliographic access. Unless they are properly indexed, we can expect little or no demand for these items. That there are 40 thousand, 100 thousand, or even 200

thousand serial titles being published is of little concern if the user cannot identify those specific materials needed for his research.

Another limiting factor, or what could be considered a limiting factor in terms of self sufficiency, is that of space. All libraries, of course, are constantly faced with the problem of more and more room for books and readers. In the technological sense, however, this matter does not need to be of prime concern. We know that the theoretical reduction ratio is phenomenal! We can put a large number of bibliographic units into a very small space. If we are not satisfied with the 20 to 1 reduction of standard microfilms, then we can go to the 200 to 1 reduction of ultra micro-forms. If either reduction ratio is used, space required for materials is of little importance. If the problem of space is measured against the ease of use by the user, then it is another matter. The question is one of the inconvenience of use of a reader for the little-used research materials as opposed to the ever-increasing physical size of our libraries. This is a problem, and can cause user frustrations, but it should not be a matter limiting the self sufficiency of local libraries.

Perhaps the most important thing which will limit the degree of self sufficiency in our libraries is the lack of expertise in selecting and weeding the collections. A few years ago it was assumed that the faculty members were the primary book selectors on the university campus. Today this is no longer true. More and more the major research libraries are

developing a large staff of bibliographers whose primary responsibility is the care and nurturing of research collections. The expertise that is necessary for this type of project is phenomenal. Not only must the bibliographer be as familiar as the faculty with the subject areas for which he is responsible, but he must be a person with that undefinable book sense. Not only do the collections have to be built, but they must be maintained. The older copies and the outworn copies must be discarded and other copies added to the collections. Of all of the factors affecting the self sufficiency of the library, probably the matter of bibliographic expertise is the most important and the most self-limiting. If we cannot or will not staff our libraries with trained bibliographers, then it will be necessary to reinvolve the faculty or find other alternatives for the development of research collections.

There may be an optimum collection size that can be effectively managed in libraries. How many titles can be handled in one central serials record file? Is there an optimum size before the system breaks down? How effective is a very large card catalog, as opposed to several smaller catalogs providing access to the collections? We continue to act as if there were no size limitations on our library procedures and practices. The cost of adding materials to collections of five million volumes may be more limiting than the cost of purchasing materials. A million volume library can handle its technical processes much more effectively and efficiently than a five million volume library. Perhaps there is a maximum size which

will be the breaking point in our operations.

Another matter limiting local self sufficiency is that of the unavailability of materials requested by a user. They may very well be in the system, but they are not available for his immediate use. In some cases this lack of availability is tantamount to a lack of ownership of a desired item. Some recent studies show that from 30 to 50 percent of the items requested in major research libraries are not on the shelf and immediately available at the time of request. This seems to give some credence to an earlier assumption that a large amount of use is to a relatively small number of titles. Nevertheless, this lack of physical accessibility, even when the item is owned, is a matter of increasing concern to the researcher and other library users. Does self sufficiency mean providing a copy upon demand, or does it mean having a card in the catalog? If it is the former, then our libraries are becoming increasingly less self sufficient.

FACTORS FAVORING SELF SUFFICIENCY

If there are a number of factors that limit the self sufficiency of libraries, then there are others that encourage us in the attempt to provide all materials locally. The technology of micro-copying, of course, is the most important. Now it is possible to have an edition of one. If an item can be located in any library, then an edition of one can be made available to another library. This type of availability makes it ever more possible for a library to respond to the requests

of the users.

A new dimension of library self sufficiency has been added recently with ultra micro-fiche. The real breakthrough is not in terms of the 200 to 1 reduction, but rather with the ease of making additional copies of these materials. If a million volumes can be produced for one library, then copies from the master film can be reproduced quickly and inexpensively for other libraries. It is not unreasonable to assume that the collections of Harvard, the New York Public Library, and the University of Illinois will soon be made available at a rather inexpensive cost to all other libraries in the world.

The most pressing factor pushing libraries to strive for self sufficiency are the demands of the user. Most library users are more concerned with the immediate access of materials than they are in the cooperative endeavors. There is a constant pressure on the library to acquire for on-campus use those materials which are demanded by the students and by the faculty. They care not that the library is part owner of a copy in Chicago; they want full ownership of a copy on the local campus. This factor, coupled with institutional pride, might well lead one to believe that cooperation and networking are fine in theory, but not useful for an individual campus. It is almost as easy to design an overall system of dissemination of information than to tell a faculty member or student that his book will be available from some other source at some later time. Not only will our users not wait a week, or even overnight, for an item, they are frustrated if they must wait five minutes.

SUMMARY AND ALTERNATIVES

As one reviews the various disciplines and as one looks at the types of libraries, perhaps we have been overly critical of our efforts to provide research materials to our users. It is reasonable to assume that most of our libraries are self sufficient for most of their users.

What we are concerned with, therefore, is the small percent of demands which cannot be met from our local collections. Before we develop grandiose networking schemes, at great expense, perhaps we should have a better idea as to what needs are not being met by traditional programs. It is likely that for an expenditure of a few more dollars we could more nearly approach complete self sufficiency with our present system than we could with a network that was designed to provide physical access to materials.

If we include in our definition of self sufficiency the concept of interlibrary loan, either by traditional means or with the new electronic devices, then we will find that our libraries are even more self sufficient. At the Automation Conference in 1962 it was suggested that some 80 percent of all interlibrary loan requests to National Union Catalog, and this is often a last resort, are located. If we put this 80 percent together with an earlier assumption that we are already 80 percent self sufficient, then it leaves a very few items which are not currently being provided to the library user.

It becomes obvious that the major emphasis of library

networking should be on providing better bibliographic access rather than physical access to materials. The libraries of today score very high in terms of physical access. We do need help from the new technology to improve bibliographic access. Any networking scheme must give this top priority.

As alternatives I would offer two possible schemes of networking which might provide the final small percent of physical access and could greatly improve our bibliographic access.

The first of these can be described "collections of excellence." In libraries scattered throughout the country there are collections that excel all others. These collections should be identified and described. A mechanism could be developed to direct the user to the definitive collection in his area of interest.

The library responsible for a particular collection of excellence should be encouraged to provide detailed bibliographic access to the collection. Also, the library would assume continued collecting in depth. The collections might conceivably develop through the years as information analysis centers.

Another networking concept which should be given consideration is the that of collections of materials by types. There should be one place in our country where we could go for all periodicals; there should be another place where we could go for all state documents; and still another for research reports. This concept can be expanded as far as definitions can be made

for types of materials. The great advantage of this networking concept lies in the ability of a library to know where materials can be found. No elaborate switching mechanism is necessary to direct the library or the patron in the right direction. These collections by type of material could also provide bibliographic listing and searching in their specialized fields.

To return to our lapel button--networking is not a fairy tale--perhaps it will be a fairy tale unless every effort is made to design a network that is more than new devices for current services. Elaborate schemes, at great expense, that do little more than make the last three or four percent of materials available are likely to be rejected by librarians and the public.

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